

**REMARKS**

This amendment responds to the office action dated December 15, 2008.

The Examiner has stated that independent claim 4 is allowable, and that independent claim 3 would be allowable if rewritten in independent form. The Examiner rejected the remaining claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Lim, U.S. Patent No. 5,434,622 in view of Pan et al., U.S. Patent No. 2005/0068343 (hereinafter Pan).

Pan is the publication document of the present application. The applicant takes note of the fact that in supporting present rejection by citing the teachings of Pan, the Examiner points to the “Background of the Invention” section, presumably on the basis that this disclosure is prior art to the present application. Having said that, the Examiner also cites to the disclosure of the claims of the present application (claim 6) as prior art, as well as the detailed description (par. 0182) which does not appear to be an appropriate basis for an obviousness rejection.

Even apart from the citation of the applicant’s own disclosure in the Examiner’s rejection, that rejection is not warranted under 35 U.S.C. § 103(a). The applicant understands the Examiner’s rejection to allege that Lim discloses receiving a frame of an image and encoding that frame by “overdriving” a pixel of the frame to a new value based on a “prediction” from a pixel of a *subsequent* frame. The Examiner cites Pan for the disclosure that existing overdrive techniques will overdrive pixels based on luminance values of an overdriven pixel of a display in a *previous* frame. This analysis is flawed in two respects.

First, the Examiner is misreading the disclosure of Lim, which teaches a method for image compression when encoding an image using an inter-frame technique called “predictive” encoding. Predictive encoding will encode a current frame in reference to data in a previous frame (and not a subsequent frame as alleged by the Examiner) to reduce the data required to encode the current frame. In particular, the current frame is encoded by referencing the previous frame and then simply encoding the differences between the two frames. Thus, a careful reading of the cited primary reference indicates that it only discloses using a previous frame as a basis for encoding a current frame, and not using a subsequent frame.

More importantly, the teachings of Lim and Pan have nothing to do with each other, and cannot be combined as suggested by the Examiner. Lim teaches a method of compressing an image when digitally encoding the image. Pan (i.e. the present application) relates to methods of driving LCD display pixels (an apparatus) in a manner that more closely achieves whatever image pixel data is encoded, by overdriving the display to voltages above what would ordinarily be used to produce the target pixel intensity, due to the response lag of the LCD panel. In other words, an LCD crystal might ordinarily take too long to get to the targeted steady-state luminance level, so the solution is to boost the voltage to a higher luminance so that the LCD crystal reaches the desired state in time. One of ordinary skill in the art would not incorporate the teachings of Pan so modify Lim, as argued by the Examiner, as doing so would result in an image that *is not properly encoded*.

In fact, the applicant cannot think of any useful way of combining the references, because the overdrive values used in the teachings of Pan are *display-dependent*. Image data cannot be pre-corrected using the teachings of Pan because, not only is the response characteristics of

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various LCD displays different, but there is no foreknowledge of whether the image will be displayed on an LCD panel in the first instance. Thus, any such attempt would only result in a deteriorated image.

In any event, the applicant has amended claim 1 to recite the limitation of “modifying said current frame to alternatively increase or decrease the luminance output of a portion of said display corresponding to a pixel of said current frame, by overdriving a voltage to said portion to a current value automatically selected based upon: (i) at least one predicted displayed luminance value of said pixel in respective ones of at least one subsequent frame of said video image.” Lim fails to disclose this limitation, and no portion of the present disclosure that describes the prior art relates to this limitation.

For each of these reasons, independent claim 1, as well as its dependent claim 2, patentably distinguishes over the cited prior art.

In view of the foregoing amendments and remarks, the applicant respectfully requests reconsideration and allowance of claims 1-4.

Respectfully submitted,



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